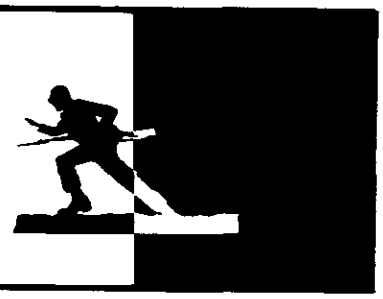
PROFESSIONAL FORUM



Lightweight Company Mortars

Options for Employment

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The M224 60mm lightweight company mortar system is an excellent indirect fire weapon, thanks to its responsiveness, range, light weight, and high rate of fire. Shortcomings in employment, fire support, logistical resupply, and training, however, significantly hamper the use of organic indirect firepower in the air assault, light infantry, and airborne battalions equipped with these mortars.

Employment. Too often, the 60mm mortars are forgotten during infantry operations. Company commanders are too busy with direct fire engagements, movement, logistical considerations, artillery indirect fire support, attack helicopter fires, and checking their infantry platoons to place their mortars properly, maneuver, and direct their fires.

Fire Support. If an infantry battalion is to make the most of its organic indirect fire support, it must be able to mass all of its 60mm and 81mm mortar fires. Unfortunately, current doctrine and fire support channels have no system in place for controlling and massing the fires of both of these systems at the same time.

Logistical Support. To take full advantage of the 60mm mortar's close-in fire support, high rate of fire, and quick responsiveness, a unit needs a large amount of ammunition readily available. A rifle company simply cannot carry this much ammunition and get it to its mortar section quickly enough, especially in dispersed operations such as search and attack or during low intensity conflict operations. The doctrinal solution of having each man carry two rounds in his rucksack is unrealistic.

Training. Because 60mm mortar training is rarely given priority in garrison operations, units must conduct hasty training before their live-fire range training and field problems. Because of the number of available soldiers in MOS 11C, a company mortar section is usually commanded by a junior sergeant with little experience in training and operating a 60mm mortar section. Rifle company training, both individual and collective, focuses on 11B skills and tactics and rarely allows 11C soldiers to exercise the full freedom they need to train effectively. In addition, companies often lack the necessary knowledge in basic mortar operations to train their 11C soldiers to standard.

In an effort to correct these deficiencies in employment, fire support, logistical support, and training, I would like to explore the concept of a battalion 60mm mortar platoon, examine the advantages and disadvantages, and offer a recommendation on each employment method. This platoon would not replace the company mortar sections, but it would make the most of mortar employment in situations that do not normally favor 60mm mortar operations at company level.

Although the proposed platoon is based upon the modified tables of organization and equipment (MTOEs) for an air assault infantry battalion, with slight modifications it will also work for a light infantry or airborne battalion.

The 60mm mortar platoon would consist of two three-gun sections, with all the equipment and personnel from current MTOEs. Each section would be organized as follows:

- Nine soldiers—one staff sergeant, two sergeants, three corporals, and three privates first class as shown in Figure 1.
- Assigned individual weapons.
- Two AN/PRC-77 radios (with KY-57 secure devices).
- Three M224 mortar systems.
- Three M23 mortar ballistic computers (MBCs).
- Three M2 compasses.
- One M998 high mobility multipurpose wheeled vehicle (HMMWV) to assist in movement and resupply.
- TA-50 by DRF-1 packing list.

• Nuclear, biological, chemical (NBC) equipment as dictated by the mission oriented protective posture (MOPP) level.

• All other associated equipment authorized by the modified tables of organization and equipment (MTOEs).

One HMMWV would be supplied by the antiarmor company and the other would be from the headquarters and headquarters company's (HHC's) 81mm mortar platoon. The responsibility for supplying the additional AN/PRC-77 radio and KY-57 Vinson secure device would rotate among the three rifle companies.

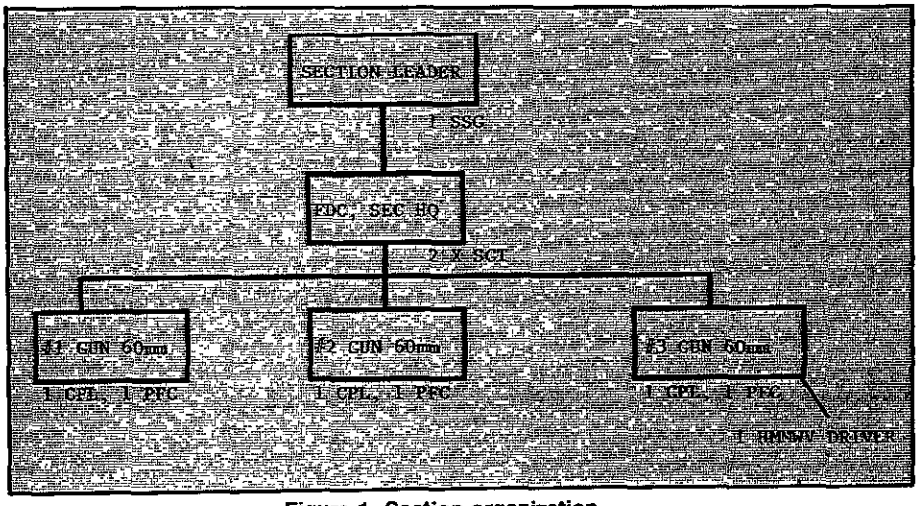

Figure 1. Section organization.

Employment

The two mortar sections could be employed either under task force control or, along with the 81mm mortar platoon, as a mortar team (Figure 2).

Using the first of these options, the 60mm mortar sections, with three mortars each, would maneuver under the control of the battalion commander and the S-3, with guidance from the battalion fire support officer (FSO). The 81mm mortar platoon would maneuver separately from the 60mm mortar sections but in support of the battalion's overall fire support plan. The two 60mm mortar sections might locate together as a platoon, depending upon conditions of mission, enemy, terrain, troops, and time (METT-T). The section leaders would attend battalion orders briefings and resupply directly from the battalion combat trains.

Using the mortar team option, the 81mm mortar platoon leader would maneuver the two 60mm mortar sections (three mortars each) and his own 81mm mortar platoon (four mortars) in support of the battalion fire support plan with guidance from the battalion commander, S-3, and FSO. As with option 1, the two 60mm mortar section leaders would attend battalion orders and resupply directly from the battalion combat trains. Although the 81mm mortar platoon leader would be responsible for the command and control of the two 60mm mortar sections, each section would retain responsibility for its own resupply.

In addition, an integrated 60mm mortar platoon could be used under either of these concepts. The senior staff sergeant from the rifle company mortar sections would lead the 60mm mortar platoon. He would attend task force operations orders and coordinate resupply directly from the battalion combat trains. All other section operations would be the same as those described above.

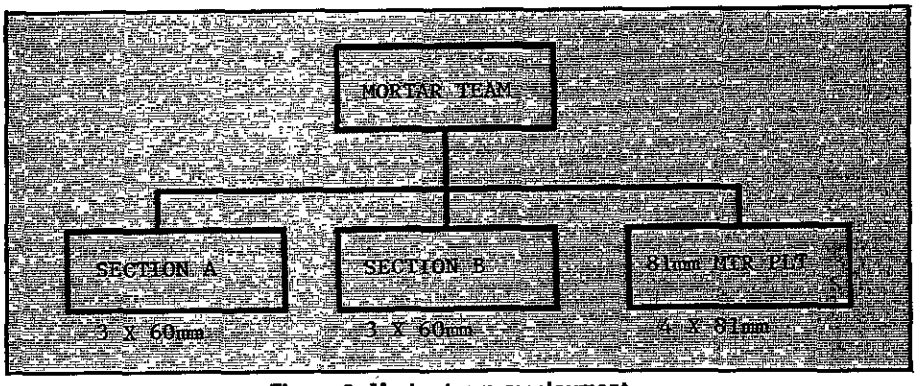

Figure 2. Mortar team employment.

Each 60mm mortar section could be positioned according to one of three common methods—in line, in a "V" configuration, or by terrain mortar positioning (TMP) (Figure 3). METT-T considerations would determine the best method to use.

A 60mm mortar section could usually provide its own limited local security. Figure 4, for example, shows the "V" configuration. The following defensive measures would also be in place to supplement this defense:

• All soldiers would be armed with M16A2 rifles.

• Claymore mines and hand grenades would fill out the defense.

• Each mortar would be positioned to fire down one "leg" of the triangle, similar to the way M60 machineguns are placed in a patrol base.

• Close-in fire support by direct lay/direct alignment would be provided by the 60mm mortars.

Command, Control, and Communications

The addition of two more maneuver, indirect fire support elements to an already cluttered battlefield would place a command and control burden on the already-hardpressed battalion tactical operations center (TOC) and the S-3. Close control of the 60mm mortar sections by the battalion S-3, however, and accurate reporting by the sections would reduce these problems.

With the two 60mm mortar sections under task force control, both of the staff sergeant section leaders would report their progress on the battalion command net. They would report only their positions and ammunition status and strictly

monitor the battalion command net. Most of their radio traffic would be in receiving calls for fire on the 81mm mortar fire direction center (FDC) net or on one of the company 60mm mortar nets designated for FDC use. For resupply and logistical coordination, the sections would switch to the battalion administration/logistics (A/L) net.

Under the mortar team concept, the 60mm mortar sections would monitor both the battalion command net and the 81mm mortar FDC net. The 81mm mortar platoon leader would maneuver the 60mm mortar sections over the 81mm mortar FDC net, and all calls for fire would be on the 81mm mortar FDC net. Here, too, the 60mm mortar sections would drop down to the battalion A/L net for resupply and logistical coordination.

Fire Support

Mortar fires need to be able to mass quickly, fulfill the commander's intent for fires, and then, just as quickly, decentralize to continue supporting the battalion task force. Currently, 60mm mortar fires are cleared from the company FSO to the battalion FSO. With all mortar fires centralized on one FDC net, the battalion FSO could quickly and reliably clear all mortar fires. This method would increase the timeliness of fire missions and eliminate unnecessary links in the chain that could result in garbled messages and greater risk of fratricide.

Under a centralized mortar FDC net, the battalion FSO, or one of the company FSOs, could also effectively mass the mortar fires of the entire task force onto one target. This would greatly improve the battalion task force's organic indirect fire capabilities and lead to better target effects. Furthermore, there could be a mortar indirect fire main effort in which the battalion S-3 planned to mass fires for attacks, raids, suppression of enemy air defenses, and the like.

The battalion task force commander, S-3, and FSO would have a variety of mortar employment options. For example, the company designated as the main effort in the attack could receive priority of 105mm artillery fires, the company with the secondary effort priority of 81mm mortar fires, and each of the two remaining companies priority of a 60mm mortar section. This option would allow each company commander a full-time, dedicated, and effective indirect fire support option.

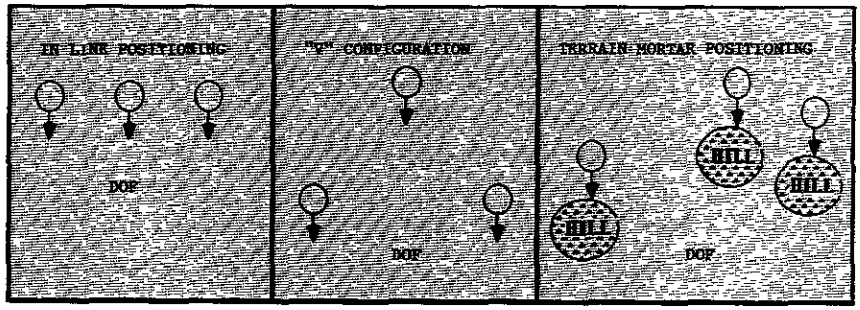

Figure 3. Common positioning methods.

The 81mm mortar FDC net centralizes mortar fire missions, which would allow any company FSO to call the 81mm mortar platoon or one of the 60mm mortar sections to receive a fire mission. Because of the number of mortar fire support options, decentralized fire support to supported units and centralized control and clearing of all mortar fires on one net would simplify fire support, maintain unity of effort in 60mm mortar employment, and ensure a system of clearing all battalion mortar fires, thus reducing the probability of fratricide from indirect fire.

Logistical Support

No matter which methods of employment, command and control, and fire support are used, the most vital need is for a dependable resupply of ammunition, fuses, spare radio batteries, and the like.

The best means of transporting 60mm ammunition is first by air and second by vehicle. Ammunition for the 60mm mortars could be sling-loaded in A-22 bags or 10,000-pound cargo nets and dropped at the two separate 60mm section positions; or it could be carried by the HMMWV attached to each 60mm mortar section. These methods would allow the 60mm mortar sections to receive a large resupply of ammunition by air and carry the excess in the HMMWV. The HMMWV would also give the 60mm mortar sections adequate ammunition in a hipshoot situation.

The attached HMMWV would also be the primary source of sustainment for the 60mm mortar sections, carrying not only ammunition but also Class I resupply, five-gallon water cans, and the like. In short, the HMMWV would give the 60mm mortar section an effective way to sustain itself. In case of maintenance problems, the vehicle would be evacuated directly to the combat trains.

Training

For the concept of 60mm mortar sections or platoons to be effective in the field, company mortar sections would need to train together in garrison. Unified training for the sections would provide better 11C training, focus mortar resources and knowledge at one location, and establish a battalion standard for a 60mm mortar section.

The 81mm mortar platoon leader would supervise the planning and execution of 60mm mortar training. The senior 60mm mortar NCO would become the NCO in charge of planning and executing battalion 60mm mortar training. The company executive officers (XOs) would provide resources and logistical assistance to all planned 60mm mortar training. The intent would be the centralization of training resources and knowledge but the decentralization of training execution.

The 60mm mortar sections would have their own scheduled field training exercises (36 to 48 hours) in which to practice specific tasks. On battalion field training exercises, the sections would deploy in accordance with the battalion commander's and the S-3's task organization for 60mm mortar support (that is, the task force control concept, the mortar team concept, or separate company 60mm mortar sections).

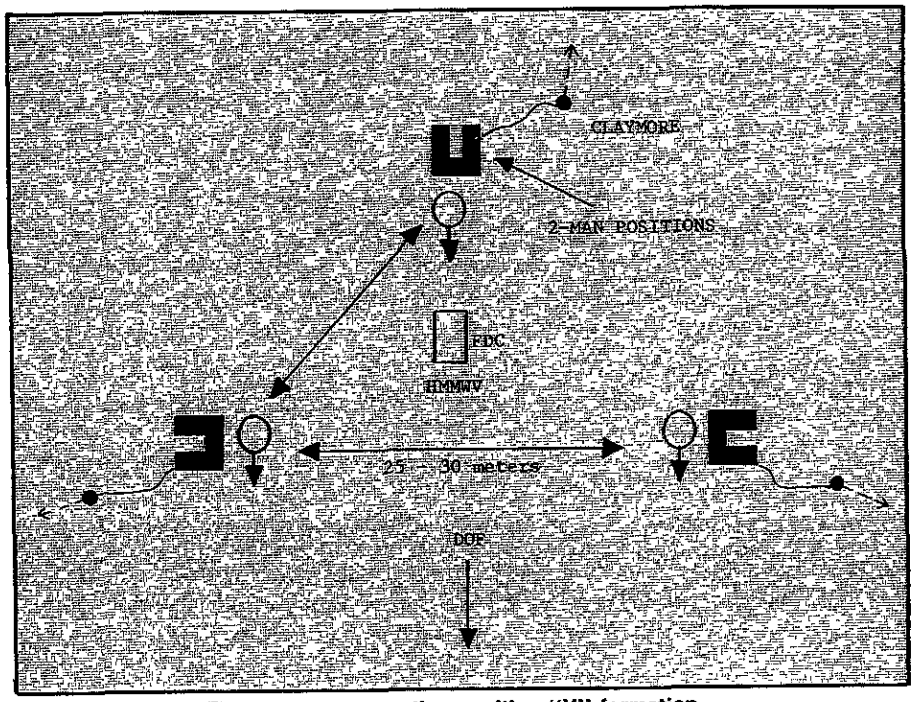

Figure 4. 60mm section position "V" formation.

Company 60mm mortar sections would perform weekly maintenance on Mondays with their respective companies, while Tuesdays, Wednesdays, and Thursdays would be 60mm mortar training days. Company time, personnel actions, and soldier appointments would be on Fridays. Battalion training events, however, would take priority over all mortar training.

Unified 60mm mortar training would allow the battalion to establish standing operating procedures (SOPs) for 60mm mortars. The soldiers in the 60mm mortar units could practice occupation of positions, misfire procedures, and laying the mortar together to establish SOPs for all 60mm mortars. This would enable the company commanders to expect and demand a basic standard of 60mm mortar support and the sections to operate as a 60mm mortar platoon when task organized.

Unified training would also greatly improve the training level of a battalion's 60mm mortar sections. Company commanders could expect trained and ready mortar sections that could operate either independently of their companies in 60mm mortar platoons or under the control of the company commanders.

This proposed 60mm mortar platoon concept offers many advantages:

- The fires of the 60mm mortars could be massed.
- Resupply would be eased, with two sections instead of three.
- Three mortars would deliver more steel on target.
- With the attached HMMWV, a section would be more mobile and would carry larger supplies of ammunition and additional sustainment supplies .
- Clearance of fires would be simplified to increase fire support responsiveness and reduce fratricide risks from indirect fire.
- Following 60mm mortar training guidance, light infantry, airborne, or air assault infantry would have a basic SOP for 60mm mortar section operations.
- The 60mm mortar platoon adheres to and supports U.S. Army warfighting doctrine.
- The mortars could supply their own limited local security.
- The flexibility of the 60mm mortar platoon concept would allow the selection of the fire support options that best suit the maneuver plan.

The concept also offers some disadvantages:

- The HHC 81mm mortar platoon and the antitank company would give up one vehicle each to support the 60mm mortar sections.
- Depending on task organization, company commanders could sometimes lose the instantaneous responsiveness of their own dedicated mortar sections.
- New resupply methods would be needed to get 60mm mortar ammunition to the sections, instead of just to the rifle companies.
- Motivated, highly disciplined, and tactically proficient junior NCOs would be needed to lead and fight the 60mm mortar sections.
- Call-for-fire radio traffic might overwhelm one FDC net, causing delays and lost missions.
- Leaders would have to make a dedicated effort to work through problems in the new system.
- Battalion TOC would have to fight, maneuver, and communicate with two additional assets.

This proposed 60mm mortar platoon is not intended to replace the current organization of a rifle company's two-mortar sections. It is offered as a way to give the infantry battalion task force more effective organic mortar fires. The 60mm mortar platoon would make the most of mortar employment at times when conditions did not favor 60mm mortar operations at company level. The 60mm mortar platoon could be employed in operations such as airfield seizures, deliberate attack, suppression of enemy air defenses, and military operations on urban terrain.

In short, the 60mm mortar sections would have established SOPs and a basic standard of training; the task force could mass all its mortar fires; the 60mm mortars would be used to their full destructive potential in all operations; and the battalion commander would have a greater number of mortar fire support options.

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